

July 12, 2005
Via Certified Letter



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ATTORNEYS AT LAW
RICHARD L. TREANOR
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Re: U.S. Application Serial No. 10/341,525
Assigned to Hussmann Corporation
Your Ref.: 047177-9109-00
Our Ref: 260772US-2010-1247-0-CONT

Dear Sir:

Attached hereto you will find a Declaration material to the patentability of at least Claims 113-115 and 121-124 of Application Serial No. 10/341,525, currently pending. This information is supplemental to that provided to you on March 21, 2005.

As you are prosecuting Application Serial No. 10/341,525, we expect that the enclosed information, which is inconsistent with the position that these claims are allowable, will be submitted to the U.S. Patent Office for the Examiner's full consideration.

We are enclosing a second copy of the material sent to you on March 21, 2005, as well as a copy of our letter to you of that date. This information does not appear to have been provided to the Examiner in Application Serial No. 10/341,525.

Very truly yours,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

COPY
Richard L. Treanor

RLT/jot

Enclosures: Declaration of Dr. Marie-Isabelle Watchi
March 21, 2005, Letter (Copy)
Information Material to the Patentability of Claims (Copy)
(4) U.S. Patents

DOCKET NO: 260772US0CONT



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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF

RINO MESSERE, ET AL.

SERIAL NO: 10/981,585

FILED: NOVEMBER 5, 2004

FOR: TRANSPARENT GLAZING AND
USE THEREOF IN A CHILLING
CHAMBER DOOR COMPRISING IN
PARTICULAR A GLAZING UNDER
VACUUM

: EXAMINER: ERMA C. CAMERON

: GROUP ART UNIT: 1762

:

DECLARATION UNDER 37 C.F.R. § 1.132

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Now comes Dr. Marie-Isabelle Watchi who deposes and states:

1. That I am a graduate of the Universite Pierre and Marie Curie, Paris VI, Paris, France, and received my Ph.D. degree in the year 2000 in the field of polymer chemistry; that I have been employed by St. Gobain Recherche for 4 years as a researcher in the field of polymer coatings; and that I am familiar with polyurethane chemistry and polyurethane coatings on substrates such as glass.

2. That I have reviewed the prosecution history of U.S. patent application Serial No. 10/341,525 (the '525 application), and concluded that the polyurethane coating described in Funaki (U.S. 5,766,739) provides a coating having a hydrophobic surface having a surface tension and a hydrophilic interior having a hydrophilicity as described in the '525 application. The reasons for my conclusion follow.

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3. The '525 application specifically states that coatings having a hydrophobic surface and hydrophilic interior are produced by the reaction of a generic isocyanate and a generic polyol (i.e., the reaction that produces a polyurethane):

The reaction of the isocyanate and the polyol forms a part hydrophilic and part hydrophobic polyurethane composition when reacted and cured under particular conditions.¹

As explained in paragraphs 0056 and 0101 of US2003/0205059, the "particular conditions" for the reaction and curing of the isocyanate and polyol to produce a part hydrophilic and part hydrophobic polyurethane composition are quite typical for polyurethane production in general: reaction under heat, at a temperature of 80-180 °C. In fact, in the '525 application a generic mixture containing materials identified only as "Polyol" and "Isocyanate" were mixed and cured under heat, and the product was identified as having a hydrophobic surface and a hydrophilic interior:

The resulting cured coating is part hydrophilic and part hydrophobic. More particularly, the surface is substantially hydrophobic, while the interior is substantially hydrophilic.²

In view of this definition in the '525 application of what is included within the meaning of a polyurethane coating having a hydrophobic surface and hydrophilic interior, it is absolutely clear that the coatings produced by Funaki (U.S. 5,766,739) have a hydrophobic

¹ See paragraph 0055 middle, of US2003/0205059 (emphasis added).

² See paragraph 0096 and lines 1-2 of paragraph 0103 of US2003/0205059 (emphasis added).

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surface and hydrophilic interior as defined in the '525 application, and that the production processes described in Funaki fall directly within Claims 113 – 115 and 121- 124 currently pending in the '525 application.³

For example, coatings of the type described in Funaki made from polyol and isocyanate inherently possess a surface tension, and any material having a hydrophilic interior would necessarily have a hydrophilicity. In this regard, the polyol/isocyanate polyurethanes of Funaki meet the particular claim limitations of Claims 114, 115 and 121-124 of the '525 application because these polyurethanes fall within the polyol/isocyanate weight ratios, and are cured at the same temperatures, as described in the '525 application for the mixtures noted at paragraphs 0095 ff of the '525 application.

In detail, Funaki discloses coating a mixture of blocked isocyanate and polyol on the spy glass of a refrigerator door, followed by curing. See, for example, column 3, lines 27-28 and 58-63 of Funaki, which details the use of a mixture of a blocked isocyanate and a polyester containing residual hydroxyl (OH) groups (i.e., a polyol). This conductive paste is applied to a spy glass of a refrigerator door and cured, for example at a temperature of from 80-130°C. See column 4, lines 49-50 of the reference. Note also Example 1 at column 6, lines 21-35 wherein a mixture of polyol (polyester resin) and block type isocyanate is cured at 120°C for 45 minutes on a transparent polycarbonate sheet. According to the '525 application, this process would form a hydrophobic surface having a surface tension and a hydrophilic interior having a hydrophilicity. See Claim 113 of the '525 application. The surface tension and hydrophilicity characteristics of Claims 114, 115 and 121-124 of the '525 application similarly would be met inherently, or otherwise determinable by one repeating Funaki, perhaps with various known polyurethanes.

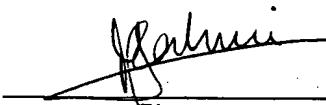
³ See the Amendment filed on February 14, 2005, in the '525 application.

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One possible technical explanation for the hydrophobic surface/hydrophilic interior of the polyurethanes described in the '525 application is the natural tendency for hydrophobic and hydrophilic portions of a polymer to cluster with like-kind portions upon curing. As this tendency is true generally, it is also true for the Funaki polyurethanes. However, the '525 application nowhere teaches how to provide coatings with specific surface tension values or specific hydrophilicities, and in this aspect fails to allow someone to repeat their claims. While these characteristics are inherent for a given coating, the '525 application does not teach one how to select the coating or the coating components in order to provide the specific values described in Claims 114, 115 and 121-124 of the '525 application.

4. The undersigned petitioner declares further that all statements made herein of her own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

5. Further deponent saith not.


Signature


Date